The Toxic Exposure
Surveillance System (TESS)
and Its Use at the
U.S. Consumer Product
Safety Commission

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These comments are those of the CPSC staff, have not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.

What is TESS?

- Database containing information on all calls made to most poison control centers in the US.
- Contains 33.8 million human exposure cases from 1983 to 2002.
- Now covers 99.8 percent of the US population.

TESS at CPSC

■ CPSC buys data from the American Association of Poison Control Centers annually.

CPSC's portion of the database includes only cases involving children under five years of age.

Contents of TESS

Important variables collected by TESS include:

- Patient demographics
 - Age, Gender, Weight
 - Much more
 - No sensitive patient ID info

Contents of TESS

- Substance information
 - PoisIndex code
 - Substance code ("generic" code, not necessarily corresponding to PoisIndex code)
 - Formulation (liquid, cream, etc.)
 - Text description of substance
 - Multiple substances
- Scenario
 - What happened?
 - Where, why, how

Contents of TESS

- Clinical Effects
 - All symptoms
- Therapies
 - Care administered at home or health care facility
- Miscellaneous
 - Medical Outcome (ranges from no effect to death)
 - Route (e.g., ingestion, dermal, inhalation)
 - Management Site (e.g., home, hospital)

How does CPSC use TESS?

Periodic analyses of number of exposures and injuries to known hazards

Examples:

lamp oil methacrylic acid (nail primer)

New data analyses on number of exposures to suspected hazards or non-hazards

How does CPSC use TESS?

■ NEISS and TESS are compared as tests of reasonability for each other.

For example, if through NEISS we estimate 100,000 children under 5 were treated last year for poisoning by widget cleaners, but TESS only shows 5,000 were exposed, then the difference is not reasonable, and we would investigate further.

Limitations of TESS

- Changing participation by poison control centers from year to year
- Can't be used to analyze trends because of changing participation
- Gives us only minimum counts, not total counts

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